



NEW BEDFORD-FAIRHAVEN-ACUSHNET

HURRICANE BARRIER

MASSACHUSETTS

NOV. 17 1962

U.S. Army Engineer Division, New England • Corps of Engineers

The NEW BEDFORD-FAIRHAVEN-**ACUSHNET HURRICANE PROJECT** Committee

*Photograph of Committee Member Joseph J. Baptiste not available.



William H. Potter Chairman



Mayor Edward F. Harrington



William E. Cleary Secretary





Elmer H. Stowell Victor N. Fleurent



Louis B. Gold



Harold V. Pierce



Daniel Debrosse



Robert Pelletier



Albert Buckles Louis Rita





Walter J. Costa



William E. Hall



James B. Buckley





Richard B. Young Richard J. Wengraf Elton A. Ashley Louis Rogissart







NEW BEDFORD LEGISLATORS

THIRD BRISTOL DISTRICT Wards 1, 2, 3, 5 & 6



Senator Antone L. Silva



Representative George G. Mendonca

Legislators in New Bedford spearheaded the bill calling upon the Commonwealth of Massachusetts to pay half of the non-federal share of the costs of the Hurricane Barrier project.



Representative Leo J. Normandin

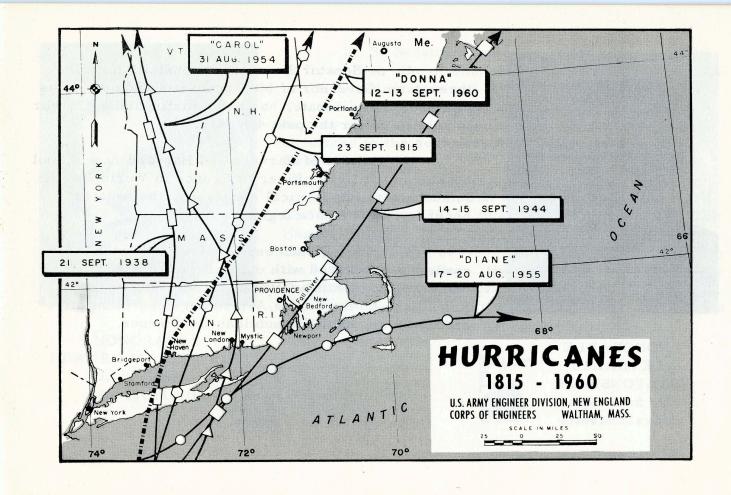


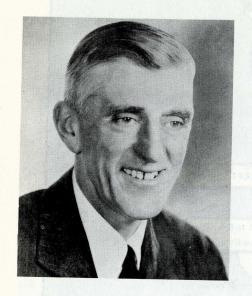
Representative Frank J. Lemos



Representative Joseph D. Saulnier

*Photograph of Representative Theophile J. DesRoches not available.





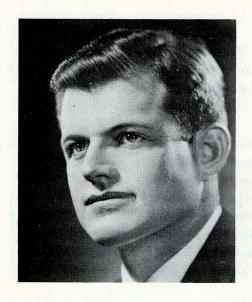
HONORABLE
LEVERETT
SALTONSTALL
U. S. Senator
Massachusetts

U. S. Senator Leverett Saltonstall, former three-term Governor of Massachusetts and now in his 18th year in the Senate, has had a distinguished career in public life for the past 4l years.

A graduate of Harvard and Harvard Law School he was an artillery officer in France in World War I. In addition to his political successes, the Senator's honorary degrees are legion.

An untiring and consciencious individual, his career is checkered with experiences almost too numerous to mention. Presently he is the ranking Republican on the Senate Armed Services Committee and Chairman of the Republican Conference.





HONORABLE
EDWARD M. KENNEDY
U. S. Senator
Massachusetts

U. S. Senator Edward M. Kennedy is a native of Brookline, one of nine children of former Ambassador to Great Britain and Mrs. Joseph P. Kennedy. The newly elected Senator occupies the seat formerly held by U. S. Senator Benjamin A. Smith II who was appointed to the seat vacated by President John F. Kennedy.

He was educated at Milton Academy, Harvard College, Class of 1954, International Law School, The Hague, Holland, 1958, and the University of Virginia Law School, Class of 1959. In 1959 he was admitted to the Massachusetts Bar. He was appointed Assistant District Attorney of Suffolk County in 1961. He served two years in the U. S. Army Infantry with assignments in France and Germany.





HONORABLE
JOHN A. VOLPE
Governor
Massachusetts

Governor John A. Volpe, a native of Wakefield and present resident of Winchester, won the Bay State's gubernatorial honors in his first contest for public office.

He entered the construction business in 1933 and has achieved outstanding success in many construction fields. In World War II he rose to the rank of Lt. Commander with the Navy Civil Engineer Corps. He was Massachusetts Commissioner of Public Works, 1953-56 and the Nation's first Federal Highway Commissioner 1956-57. In 1958-59 he was National President of the Associated General Contractors of America.





HONORABLE
HASTINGS KEITH

Congressman
Twelfth Congressional District
State of Massachusetts

Congressman Hastings Keith of West Bridge-water is serving his second term in the Congress and during his freshman session he introduced much legislation, the most important of which was a bill to establish a national seashore on Cape Cod. It was introduced jointly with U. S. Senator Leverett Saltonstall and then U. S. Senator John F. Kennedy.

He is 46 years of age and is the son of Roger Keith, a former Brockton mayor and state senator.

Congressman Keith served four years in the Massachusetts Senate. His interest in military affairs dates back to 1933 and he is a graduate of the Command and General Staff School. Currently he is a Colonel in the Army Reserve.

In the Congress he is a member of the Committee on Interstate and Foreign Commerce.





Today's ground breaking ceremony for the start of the New Bedford Hurricane Dike marks the beginning of the most far-reaching improvement in New Bedford's modern history. The dike will protect more than 30 industries which employ in excess of 10,000 persons. It will provide security for these industries, their employees, the fishing fleet, and for hundreds of homes in residential areas. The dike will attract new industries and encourage the growth of the fishing fleet.

Fourteen years ago today's reality was but a hope, kindled by the determination of a small group of business, civic and legislative leaders. Their hope was that, through the cooperation of the Federal and State Governments, and the aid of the U. S. Army Corps of Engineers, a barrier could be constructed across New Bedford Harbor which would greatly minimize or eliminate the destructive effects of hurricane floodwaters.

Interest in such a barrier was stimulated by an article in The New Bedford Standard-Times proposing that a breakwater be constructed so the communities of New Bedford, Fairhaven and Acushnet would be spared the possible loss of lives and millions of dollars worth of property to floodwaters.

The initial proposal in 1948 for breakwaters met with favorable response from the public, but in subsequent years it lost momentum. It took two violent hurricanes in 1954, loss of life, and the resultant resurgence of determination to make possible today's ground breaking.

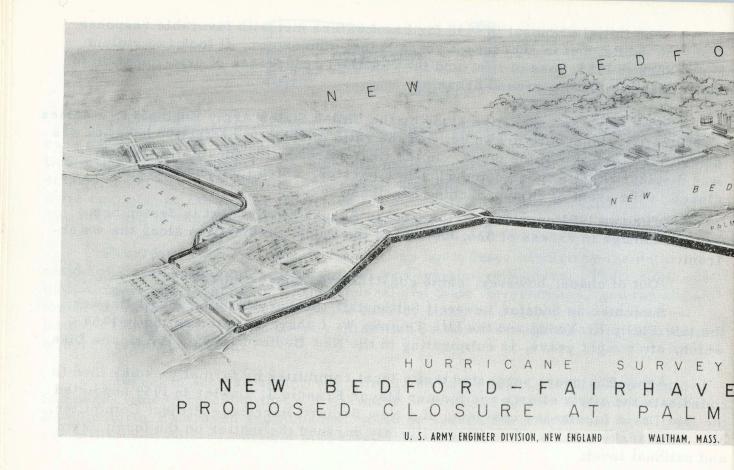
Following an exhaustive study by the United States Army Engineers, a series of protective plans were drawn up, and the ratio of costs to protective benefits was determined for each of the plans. In the final selection the idea of a breakwater was displaced with a more comprehensive barrier, which included gates to be closed in the event of an approaching hurricane.

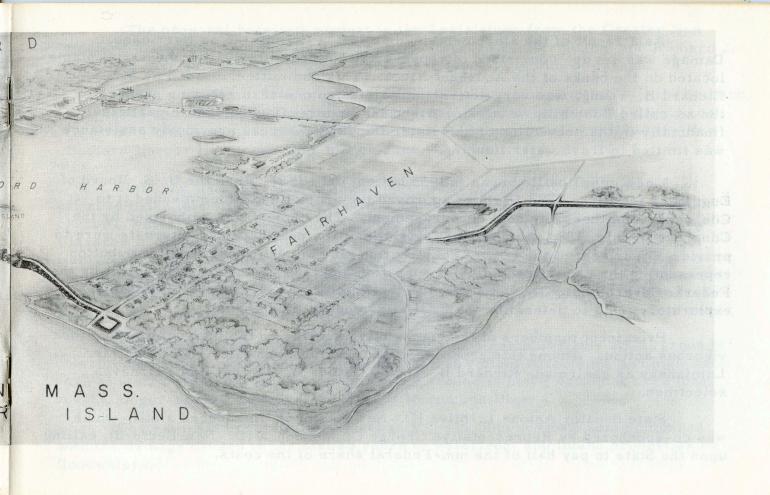
The two 1954 hurricanes, the first in August and the next in September, caused damage in excess of \$26,000,000 to the three communities along the waterfront.

Out of chaos, however, came constructive, concerted action.

Such men as Senator Leverett Saltonstall, Seabury Stanton, Basil Brewer, the late Philip E. Young and the late Thomas W. Casey, initiated action in 1954 which, after eight years, is culminating in the New Bedford Harbor Hurricane Dike.

Army Engineers suggested that a local committee be formally established to coordinate the city's efforts and former Mayor Francis J. Lawler in 1959 appointed the late David Lumiansky chairman of a New Bedford Hurricane Project Committee. Mr. Lumiansky and his committee diligently pursued the matter on the local, State and national level.





As a result of the aforementioned action, a Committee on Hurricane Damage was set up, comprised of representatives from thirty-five industrial plant located on the banks of the Acushnet River. This committee, headed by Mr. Richard B. Young, was very active and was instrumental in securing passage of the so-called Bush bill, which authorized the Federal Government to participate financially in the prevention of salt water flooding, whereas previously assistance was limited to fresh water flooding.

A new uphill battle began in 1955 but not until 1957, when the U. S. Board of Engineers for Rivers and Harbors approved the project and recommended it to Congress, was there any real encouragement. The project was authorized by the Congress in July 1958. Authorizing legislation provided that local interests were to provide 30 per cent of the cost of construction plus an additional cash contribution representing the capitalized value of operation and maintenance of the project by the Federal Government. Design started in the following year with the initiation of exploratory tests to determine the final alignment of the barrier.

Prominent members of the community, serving on the dike committee, took vigorous action. Among this group were Mr. Potter, who later succeeded Mr. Lumiansky as chairman, Richard B. Young, James B. Buckley and Fairhaven selectmen.

State Senator Antone L. Silva (D.-New Bedford), introduced a bill, which was co-sponsored by Representative George G. Mendonca (D.-New Bedford), calling upon the State to pay half of the non-Federal share of the costs.

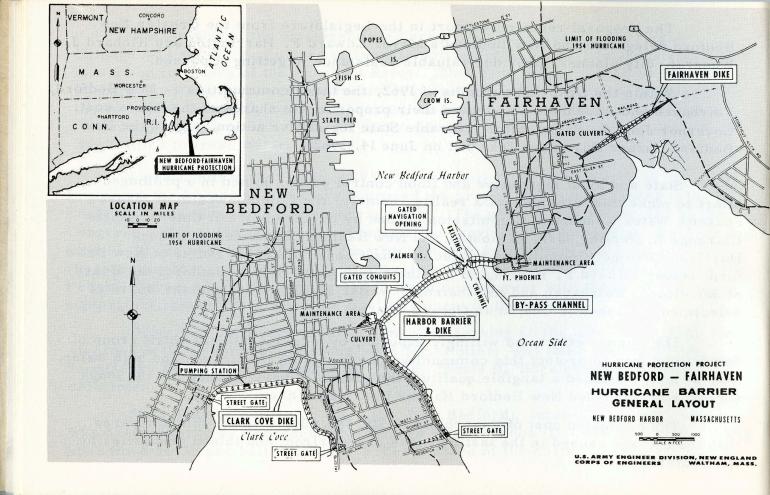
The proposal received support in the Legislature from the Greater New Bedford delegation and New Bedford's Mayor Edward F. Harrington and Richard J. Wengraf, city planner, provided valuable assistance in getting it passed.

Within the first three months of 1962, the three communities -- New Bedford, Fairhaven and Acushnet -- approved their proportionate shares of the dike's cost. Governor John A. Volpe, after favorable State legislative action, signed the New Bedford Harbor Hurricane Dike bill on June 14, 1962.

State and local legislative and flood control groups joined in a prolonged effort to make this vital project a reality, namely, the Commonwealth of Massachusetts Water Resources Commission headed by its Director and Chief Engineer Clarence I. Sterling, Jr., of Boston; the New Bedford-Fairhaven-Acushnet Hurricane Project Committees headed by Chairman William H. Potter of New Bedford; Mayor Edward F. Harrington and the City Council of New Bedford; the Board of Selectmen, Fairhaven and its Chairman Walter J. Borowicz, and the Board of Selectmen, Acushnet - Chairman Gerard Charest.

The intense effort, so willingly expended by a comparatively small group of determined men to protect this community against violent hurricanes and high water, has, at last, assumed a tangible quality - the ground is being broken for the long-sought, longer-needed New Bedford Harbor Hurricane Dike.

The estimated cost of the project is \$18,386,000, a small sum compared with the damage caused in the last 25 years to waterfront and inland properties by floodwaters.



about the project...

The New Bedford, Fairhaven and Acushnet area of the Massachusetts coast is subject to heavy losses from hurricane tidal flooding. In September 1938 and again in 1954, water depths in excess of eight feet were experienced in this region. In August 1954, losses in the project area reached \$26,000,000. A recurrence of the same flood today at present prices would cause losses estimated at \$31,000,000 with no protection. The project would prevent 30,130,000 of these damages.

The three main structures in this project, now under construction, will consist of the Harbor Barrier and Dike, plus supplemental dikes at Clark Cove and Fairhaven. The principal structure, the Harbor Barrier and Dike is approximately 9100 feet long, 4500 feet for the Harbor Barrier and 4600 feet for the Dike.

The Harbor Barrier consists of an earth and rockfill section with stone armor protection. It crosses the harbor from the New Bedford shore in an easterly direction to Palmer Island, thence east to Fort Phoenix on the Fairhaven shore. This portion contains two gated concrete conduits and a 150-foot wide navigation gate across the existing navigation channel.

The dike portion of the principal structure, approximately 4600 feet long will be constructed of earth and rockfill with stone armor protection along the west shore of the main harbor. Included therein will be a concrete structure, with a steel street gate across Rodney-French Boulevard East.

Clark Cove Dike, approximately 5800 feet long, will be constructed of earth and rockfill with stone armor protection and containing two concrete structures with steel street gates.

The Fairhaven Dike will be constructed of earth with stone armor slope protection, approximately 3100 feet long with a gated concrete conduit.

Because of the existing navigation in the harbor, the responsibility of maintaining and operating that portion of the Harbor Barrier and Dike that crosses the harbor, will remain with the Corps of Engineers.

The gates at the Harbor Barrier will be kept open during non-hurricane periods to allow the passage of ships into and out of the New Bedford Harbor.

When a hurricane posses a threat to the New Bedford area, the

gates will be closed according to prescribed procedures. The times of the closure will be based on predicted tides, advisories from the Weather Bureau, and weather conditions at the barrier. Advisories will be issued to boating interests in advance of anticipated closure.

Operating facilities will consist of two Gate Houses; one each at the east and west abutments of the navigation gates. Each Gate House will contain a stair well leading to the connecting gallery under the gate sill. The east Gate House will contain operating equipment and be used as an observation tower. The west Gate House will also have an observation tower, an office, toilet, storage area, workshop and facilities for housing, and operating equipment.

Fishing will be allowed from the barrier and provisions made for access from the top of the structure to the

water. Parking areas and a boat launching facility will also be provided. A fence will be erected at each end of the Harbor Barrier close to the sector gate structure. It will be suitably posted against trespass to prevent hazardous public use of the rough stone slope and ledges. Based on a report from the U. S. Fish and Wildlife Service, the project will not adversely affect the excellent fin fishery resources existing in the area.

The project was divided into two contracts; one for the Clark Cove Pumping Station and the other for the main barrier, which included all other work necessary for project completion.

Bids for the Clark Cove Pumping Station were opened on August 23, 1962 when a low bid of \$447, 511 submitted by the Loranger Corporation of New Bedford resulted in their being awarded the contract on September 28, 1962. On September 25, 1962, the Army Engineers opened bids for construction of the main project. The Perini Corporation of Framingham, Massachusetts submitted a low bid of \$13, 889, 820. On October 19, 1962 the contract was awarded to the Perini Corporation.

The present estimated cost of the project is \$18,386,000 (including approximately \$1,520,000 capitalized value of operation and maintenance). Estimated non-Federal cost of construction is \$7,000,000 or approximately 38 per cent of the total cost. Of this amount, the Commonwealth of Massachusetts will finance 50 per cent (\$3,500,000); New Bedford 45 per cent (\$3,150,000); Fairhaven 4-1/2 per cent (\$315,000), and Acushnet one half of one per cent (\$35,000).

CHIEF OF ENGINEERS



WALTER K. WILSON, JR.
Lieutenant General
U. S. Army

Lieutenant General Walter K. Wilson, Jr., Chief of Army Engineers, came to his present post in 1961 from that of Commanding General, U. S. Army Engineer Center, Fort Belvoir, Virginia.

A native of Barrancas, Florida, and the son of a former Army major general, he graduated from the U. S. Military Academy in 1929 and was commissioned in the Corps of Engineers. Prior to 1942 his duties include service with troops and continuance of his military and engineering education at the University of California, Cornell University, The Engineer School and the Command and General Staff College, Fort Leavenworth, Kansas.

During the early days of World War II he served with the Amphibious Corps, Atlantic Fleet, the Engineer Training Center and the 79th Engineer Combat Regiment which he commanded. After graduation from the Army and Navy Staff College in 1943 he was Deputy Engineer in Chief with the South East Asia Command, and later held a dual assignment of Commanding General, Advance Section, U. S. Forces, in the India-Burma Theatre and Chief of Staff, Chinese Army in India. Later he commanded all ground forces in that theatre.

From November 1956 to September 1960 General Wilson was Deputy Chief of Engineers for Construction.

Colonel Peter C. Hyzer, Division Engineer, U. S. Army Engineer Division, New England, assumed his new assignment October 1, 1962 after a tour of duty in Taiwan since July 1960 as Chief of the Production Advisory Team, Military Assistance Group, Republic of China.

In his new post, Colonel Hyzer supervises the multimillion dollar military and civil works program of the Army Engineers in New England.

He was born and reared in Rockford, Illinois, and attended the University of Illinois before entering the U S. Military Academy, West Point, where he graduated in 1937. He was commissioned in the Infantry and transferred to the Corps of Engineers in 1947. In 1949 he received his Master's Degree in Civil Engineering from the Massachusetts Institute of Technology.

Colonel Hyzer served in World War II with Infantry troop units and as Assistant G-3, XII Corps, in the European Theatre of Operations. His post war service included two years on the War Department General Staff in Washington, D. C., duty in Japan and Korea, Chief, Military Personnel Division, Office of the Chief of Engineers, Army War College and three years as District Engineer, U. S. Army Engineer District, Detroit, Michigan.

DIVISION ENGINEER, NEW ENGLAND



PETER C. HYZER Colonel, Corps of Engineers

Perini Corporation

Framingham, Massachusetts

Perini Corporation of Framingham, is the contractor for the construction of the New Bedford-Fairhaven-Acushnet Hurricane Barrier project under a low bid of \$13, 889, 820.

Established in January 1918 by the late Bonfiglio Perini, the corporation has grown under the leadership of his sons, President Louis R. Perini and Treasurer Joseph R. Perini, to a point where it is today one of the largest contracting companies in the world, performing every kind of construction.

In recent years, the Perini Corpora-

tion has had contracts with the U. S. Army Engineer Division, New England that total more than \$45,000,000. These include construction of various facilities such as runways, aprons, service clubs, family housing, hangars, etc. at air bases such as Loring at Limestone, Maine; and roads at Middletown, Connecticut; dams at Buffumville, Massachusetts, Otter Brook, Keene, New Hampshire; North Springfield and North Hartland, Vermont; Hall Meadow Brook, Torrington and Mad River, Winsted, Connecticut; a road relocation project for the dam at Townshend, Vermont, and the huge twin-reservoir Hopkinton-Everett project in New Hampshire.



NEW BEDFORD, MASS.

The Loranger Construction Corporation of New Bedford is building the Clark Cove Pumping Station under a \$447, 511.00 contract.

Formed in 1906 by the late Theodore Loranger, the present corporation succeeded a partnership in 1961 and is headed by Mrs. Yvonne D. Loranger as president. Other officers include Marcel A. Loranger and Albert R. Loranger as vice-presidents, treasurer and general manager Ronald R. Loranger and clerk Norman C. LaCroix.

The Loranger firm has performed many contracts in past years for the Army Engineers including projects at Air Force Bases. The corporation is currently building schools, a hospital, pumping station, a church rectory and a food plant.

U.S. ARMY ENGINEER DIVISION, NEW ENGLAND

KEY OFFICIALS

CORPS OF ENGINEERS WALTHAM, MASS.



COLONEL PETER C. HYZER New England Division Engineer

COLONEL OTTO J. ROHDE Deputy Division Engineer

ROBERT F. LAFRENZ Executive Officer

JOHN WM. LESLIE Chief, Engineering Division

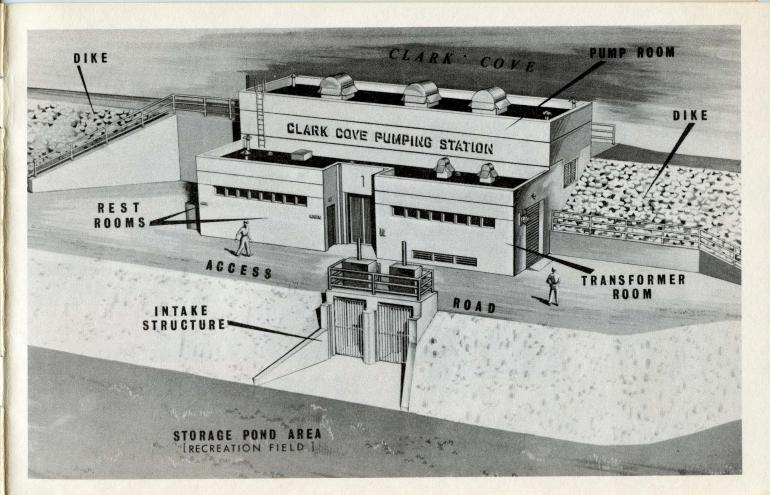
JOHN E. EKLUND Chief, Construction Division

JOSEPH M. GEOGHEGAN Chief, Real Estate Division

JOSEPH F. BURKE Chief, Supply Division

ANTONINO BAGLIONE Project Engineer

ROBERT S. JOHNSON Area Engineer









Photographs courtesy "The New Bedford Standard-Times".

The NEW BEDFORD-FAIRHAVEN-ACUSHNET

Hurricane Protection Barrier should virtually eliminate for the future any repetition of scenes like these